

RESPONSE TO PUBLIC COMMENTS

From December 22, 2006 to February 4, 2007, the United States Environmental Protection Agency (EPA) solicited Public Comments on a draft NPDES permit, developed pursuant to an application from the Town of Sunapee, New Hampshire for the Sunapee Wastewater Treatment Facility in Sunapee, NH. After a review of the comments received on the current draft permit, EPA has made the decision to issue the final permit authorizing the discharge. The following response to public comments describes the changes and briefly describes and responds to the comments on the draft permit. A copy of the final permit may be obtained by writing or calling Michele Cobban Barden, United States Environmental Protection Agency, 1 Congress Street, Suite 1100 (CMP) Boston, Massachusetts, 02114-2023; Telephone (617) 918-1539.

- A) Comments submitted by David Bailey, Superintendent, Sunapee Wastewater Treatment Facility, dated January 31, 2007.

Comment #1: *On Page 2 [of the fact sheet] it should read that Sunapee produces 170,000 dry pounds of sludge per year as this is our average from the last two years.*

Response: This correction applies to the fact sheet. However, because the fact sheet is issued in conjunction with the draft permit and is not part of the final permit issuance, it will not be modified. This comment is part of the administrative record for the final permit pursuant to 40 CFR Part 124.18

Comment #2: *On Page 2 [of the fact sheet] it should read that 85% of the sludge generated is trucked to Concord and 15% of the sludge generated is trucked to Claremont for disposal in 2006.*

Response: This correction applies to the fact sheet. However, because the fact sheet is issued in conjunction with the draft permit and is not part of the final permit issuance, it will not be modified. This comment is part of the administrative record for the final permit pursuant to 40 CFR Part 124.18

Comment #3: *It [The fact sheet] should also read that on October 17, 2005 Sunapee began a trial with geotubes for sludge dewatering.*

Response: This correction applies to the fact sheet. However, because the fact sheet is issued in conjunction with the draft permit and is not part of the final permit issuance, it will not be modified. This comment is part of the administrative record for the final permit pursuant to 40 CFR Part 124.18

Comment #4: *Please note that in P2.II it references attachment A but only attachment B is attached.*

Response: EPA agrees there was a typographical error. The DMR summary table which lists the monthly effluent data should have been labeled Attachment A, not Attachment B. The quarterly effluent data table which is labeled Attachment B is appropriately labeled.

Comment #5: *The Commission also would like [to] request the following schedule for achieving compliance with the Total Phosphorus effluent limitation:*

The permittee shall achieve compliance with the Total Phosphorus effluent limitation of 0.75 mg/l, monthly average (April 1-October 31), and the 1.0 mg/l, monthly average (November 1-March 31), as specified in Part I.A.1 of this permit in accordance with the following schedule:

- 1. By no later than March 31, 2008, the permittee shall submit plans and specifications for review and approval by the Department for the facility modification necessary to achieve compliance with the phosphorus effluent limitations.*
- 2. By no later than December 31, 2008, the permittee shall achieve compliance with the phosphorus limitations specified in Part I.A.1.*
- 3. The permittee shall submit project progress reports to the Department. Progress reports shall be submitted on the following dates: September 30, 2007, March 31, 2008 and September 30, 2008.*

Response: EPA acknowledges the comment but notes that New Hampshire Surface Water Quality Regulations do not explicitly allow the inclusion of compliance schedules in NPDES permits. Compliance schedules for New Hampshire facilities are implemented through administrative compliance orders. The permittee should contact EPA's Office of Environmental Stewardship to discuss the proposed schedule.

B. EPA was also contacted by the New Hampshire Department of Environmental Services (NHDES), Wastewater Engineering Bureau, Permit and Compliance, regarding several inaccuracies and omissions in the fact sheet and draft permit. These were:

Comment #1: Cadmium limits: *The calculation (shown in the fact sheet) used to derive cadmium limits in the Sunapee permit used incorrect coefficients. In accordance with the New Hampshire water quality standards, the coefficients in the acute limits calculation, m_a and b_a should carry values of 1.128 and -3.6867, respectively. Likewise, the coefficients in the chronic limits calculation, m_c and b_c should carry values of 0.7852 and -2.715, respectively. The final **acute** limit should be **7.04** ug/L (accounting for the dilution factor of 7.44). The final **chronic** limit should be **6.17** ug/L (accounting for the dilution factor of 7.44). Please change the cadmium limits accordingly.*

Response: EPA acknowledges the error and has corrected the limits in the final permit. The following calculations replace those in the fact sheet.

Water Quality Criteria for hardness-dependent metals:

Acute criteria (dissolved) = $\exp\{m_a [\ln(\text{hardness})] + b_a\}$ (CF)

m_a = pollutant specific coefficient

b_a = pollutant specific coefficient

h = hardness

\ln = natural logarithm

CF = pollutant specific conversion factor used to convert total recoverable to dissolved metal

Calculation of acute limit for cadmium:

$$m_a = 1.128 \quad b_a = -3.6867 \quad CF = 1.002 \quad h = 25$$

$$\text{Acute criteria (dissolved)} = \exp\{1.128 [\ln(25)] + -3.6867\} * (0.002) = 0.95 \text{ ug/l}$$

$$\text{Dilution factor} = 7.44$$

$$\text{Effluent limitation for dissolved cadmium} = 7.44 * 0.95 \text{ ug/l} = 7.0 \text{ ug/l}$$

$$\text{Effluent limitation for total recoverable cadmium} = 7.0/1.002 = 7.0 \text{ ug/l}^*$$

The maximum daily water quality based limitation for total recoverable cadmium is 7.0 ug/l

Chronic criteria (dissolved) = $\exp\{m_c [\ln(\text{hardness})] + b_c\}$ (CF)

m_c = pollutant specific coefficient

b_c = pollutant specific coefficient

h = hardness

\ln = natural logarithm

CF = pollutant specific conversion factor used to convert total recoverable to dissolved metal

Calculation of chronic limit for cadmium:

$$m_c = 0.7852 \quad b_c = -2.715 \quad CF = 0.967 \quad h = 25$$

$$\text{Chronic criteria (dissolved)} = \exp\{0.7409 [\ln(25)] + -2.715\} * (0.967) = 0.80 \text{ ug/l}$$

$$\text{Dilution factor} = 7.44$$

$$\text{Effluent limitation for dissolved cadmium} = 7.44 * 0.80 \text{ ug/l} = 5.9 \text{ ug/l}$$

$$\text{Effluent limitation for total recoverable cadmium} = 5.9/0.96 = 6.2 \text{ ug/l}^*$$

The monthly average water quality based limitation for total recoverable cadmium is 6.2 ug/l.

Comment #2: *Metals monitoring frequency: We note the metals monitoring (for cadmium and lead) are still carried in the permit as WET parameters, and the frequency of monitoring is 4/year. The EPA/NHDES Minimum Monitoring Frequency*

guidance (Revised 7/19/99) requires metals monitoring be conducted twice per month (2/month). Please change the monitoring frequency of the metals, lead and cadmium.

Response: EPA has increased the monitoring frequency for cadmium and lead to twice per month in accordance with the EPA/NHDES monitoring guidance. These metals are also required to be reported as part of WET test as detailed in Footnote 14.

Comment #3: Part I A.1., superscript footnotes: *The limits table contains a typographical error in the superscripted footnotes for the Total Recoverable metals. The footnote is shown as “4” when it really should be “14”. Please correct the superscripted footnote references in Part I. A. 1.*

Response: EPA agrees and has corrected the typographical error in the final permit.